Class VI: Primacy Application Process

Overview | January 7, 2022

Introduction

Bill file 2022 FL0537 grants the Board of Oil, Gas, & Mining rulemaking authority to oversee the Class VI well program, subject to primacy approval from the Environmental Protection Agency. In 2010, the EPA issued a rule that established minimum criteria to protect underground source of drinking water from the long-term storage of carbon dioxide. These criteria apply to Class VI wells, which are the classified well for carbon storage.

This document provides background on permitting and primacy for the Environmental Protection Agency's Underground Injection Control program with special attention to primacy for Class VI wells in Utah.

Background

Primacy

Section 1421 of the Safe Drinking Water Act (SDWA)[1] requires the Environmental Protection Agency (EPA) to develop Underground Injection Control (UIC) program requirements that protect underground sources of drinking water from endangerment.[2] The EPA has developed UIC program requirements that are designed to be adopted by states, territories, and tribes.

Primary enforcement authority, called primacy, refers to state, territory, and tribal responsibilities associated with implementing EPA approved UIC programs. A state, territory, or tribe with primacy oversees the UIC program in that state, territory, or tribe. Currently, the EPA regulates Class VI wells in Utah, and 48 other states. Utah needs permission from the federal government to gain primacy over Class VI wells in Utah.

Sections 1422 and Section 1425 of the SDWA establish the requirements for a state to gain program primacy. Section 1422 requires primacy applicants to meet EPA's minimum requirements for UIC programs. States seeking program primacy must demonstrate to EPA that the state has:

- jurisdiction over underground injection;
- regulations that meet the federal requirements for 1422 programs; and
- the necessary administrative, civil, and criminal enforcement penalty remedies.

Well classifications

An injection well is used to place fluid underground into porous geologic formations. The Underground Injection Control program consists of six classes of injection wells. Each well class is based on the type and depth of the injection activity, and the potential for that injection activity to result in endangerment of underground sources of drinking water. The six classes are:

[1] https://www.govinfo.gov/content/pkg/CPRT-106SPRT67528/pdf/CPRT-106SPRT67528.pdf, page 56
[2] https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program

- Class I wells are used to inject hazardous and non-hazardous wastes into deep, isolated rock formations.
- Class II wells are used exclusively to inject fluids associated with oil and natural gas production.
- Class III wells are used to inject fluids to dissolve and extract minerals.
- Class IV wells are shallow wells used to inject hazardous or radioactive wastes into or above a geologic formation that contains a USDW.
- Class V wells are used to inject non-hazardous fluids underground. Most Class V wells are used to dispose of wastes into or above underground sources of drinking water.
- Class VI wells are used for injection of carbon dioxide (CO2) into underground subsurface rock formations for long-term storage, or geologic sequestration.

Class VI Wells Primacy Status and Well Permit Status in the U.S.

There are two states that have been granted primacy for Class VI wells by the EPA – North Dakota and Wyoming. On June 21, 2013, the official North Dakota Class VI primacy application was submitted and on April 24, 2018 North Dakota was granted primacy by the EPA for Class VI wells.[3] Wyoming's approval period however was much shorter. On January 31, 2020, Wyoming submitted a program revision application to add Class VI injection wells to the state's SDWA section 1422 UIC program and in October 2020, it was granted.[4] This may have to do with North Dakota being the first state to apply for Class VI primacy.

Texas, Louisiana, West Virginia, and Arizona are in the pre-application phase. New Mexico, Oklahoma, Kansas, and Montana are in the "exploratory phase", or in other words, have enquired about the process.[5]

As the primacy status process is gaining ground, as are well permits. Currently, the EPA approved two Class VI well permits in the U.S., both of which are in Illinois. The EPA is also reviewing five pending permits – Louisiana has a pending permit and is in the pre-construction phase and California has four pending permits and is also in the pre-construction phase for each. None of these states, however, have primacy.

North Dakota issued a permit for a Class VI well and has three additional applicants pending. Wyoming only just made the Class VI permit application process available in October 2021.

Gaining Primacy in Utah for Class VI Wells

Primacy in Utah

The Utah Division of Water Quality received primacy from the EPA on February 10, 1983 to administer the program in Utah under Section 1422 of the Safe Drinking Water Act for Class I, III, IV, and V wells, known as the Utah 1422 UIC Program. Class II wells under Section 1425 of the Safe Drinking Water Act are administered by the Utah Division of Oil, Gas, and Mining. The Division of Oil, Gas, and Mining can likely apply for Class VI primacy on behalf of the state of Utah.

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[3] https://www.dmr.nd.gov/oilgas/GeoStorageofCO2.asp
[4] https://www.govinfo.gov/content/pkg/FR-2020-10-09/pdf/2020-20544.pdf
[5] https://carboncapturecoalition.org/wp-content/uploads/2021/06/Class-VI-backgrounder.pdf

Because Utah already has primacy for Class I-V wells, the state has a Memorandum of Understanding (MoU) with the EPA that outlines the distribution of authority for UIC programs and in particular, the authority distinction between the Division of Water Quality and the Division of Oil, Gas, and Mining. Obtaining primacy and Division oversight of Class VI wells would require modification of the MoU. It is possible that the Division may not need to go through the entire application process because of the state's current primacy for the other well classifications. However, this determination will need to be made by EPA in discussion with the Division.

Primacy Process

The EPA developed operating procedures to streamline the review and approval process in primacy evaluation and approval. The process is broken down into four phases:[6]

Phase I: pre-application activities
The pre-application phase begins when the EPA engages with a state interested in applying for the UIC program primacy. This phase is when the EPA may help the state in gaining parts of the necessary application materials, meet with the state to outline the process, address preliminary questions a state may have and determine the scope of a state's actions. The EPA may also assist the state in reviewing relevant statutes and regulations to ensure they sufficiently comply with federal regulations.

Phase II: completeness review and determination
During this phase, the EPA receives and reviews complete drafts of critical elements of the application. An application requires buy-in from the executive branch and evidence of support including:

- Governor's letter
- Attorney general's letter
- Program description
- Memorandum of agreement
- Public participation documents

Phase III: application evaluation
The EPA will complete a comprehensive evaluation of the regulations and other elements of the primacy application and coordinate with the applicant to gain clarity and confirm effectiveness. The EPA may also review public comments received during the public hearing.

Phase IV: rulemaking and codification
The EPA will draft the final ruling either approving or disapproving the state's primacy application.

Conclusion

For Utah to obtain primacy over Class VI wells, the state and the Division of Oil, Gas, and Mining will need to work closely with the EPA and Utah Executive Branch officials to satisfy the primacy process. This process may take many months, perhaps years. Any legislation passed in anticipation of primacy should be passed with this timeline and the need for interagency cooperation in mind.

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[6] https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program

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